

Application No: 10/524,168

10. (canceled)

11. (withdrawn) A nucleic acid molecule comprising a nucleotide sequence encoding the surface glycoprotein ACA or a functional derivative or fragment thereof of claim 2, wherein said surface glycoprotein contains at least one of the following amino acid sequences: (SEQ ID NO: 1) (a) D-L-V-P-L-E-D-K-V-T-I-L-G-M-T-A; (SEQ ID NO:2) (b) K-L-A-L-S-A-D-D-P-G-F-H-N-F-S-H-Q-R-Q-T; (SEQ ID NO:3) (c) D-Q-Q-T-T-S-H-S-S; (SEQ ID NO:4) (d) V-L-E-I-M-L-P; (SEQ ID NO:5) (e) F-Q-D-E-S-E-A-N-K; (SEQ ID NO:6) (f) M-K-Y-V-N-F-K-F-Y-F; (SEQ ID NO:7) (g) N-L-D-F-M-T-W-G-V-T-K-V-T-Y-I-G-Q-P-T-G-G; (SEQ ID NO:8) (h) L-L-M-D-N-N-E-A-V-H; (SEQ ID NO:9) (i) F-D-Q-A-W-A-D-T-A-H-T-W; (SEQ ID NO:10) (j) K-L-D-D-I-Q-K-D-M-Y-S-Q-Q-D-T; or (SEQ ID NO:11) (k) G-V-W-I-M-K-N-Q-I-T.

12. (withdrawn) The nucleic acid molecule of claim 11 wherein the nucleotide sequence is a genomic DNA sequence or a CDNA sequence.

13. (withdrawn) An expression vector comprising the nucleic acid molecule of claim 11.

14. (withdrawn) A host cell transformed with the expression vector of claim 13.

15. (withdrawn) The host cell of claim 14 which is a mammalian host cell.

16. (withdrawn) A process for producing a surface glycoprotein ACA comprising the steps of: (a) culturing a transformed host cell according to claim 14 in a suitable culture medium; and (b) isolating a protein from the cells or culture medium.

17. (withdrawn) an antibody to the surface glycoprotein according to claim 5.

18. (withdrawn) The antibody of claim 17 which is a monoclonal antibody.

19. (withdrawn) A method for the diagnosis of a tumor associated with overexpression of ACA or a predisposition for such a tumor which comprises (a) contacting a target sample with a compound which is capable of specifically binding (i) to the surface glycoprotein ACA according to claim 4 determining the level of ACA; and (b) comparing the level of ACA protein of the sample determined by use of the compound of step (a) with a control sample obtained from healthy individual, wherein an elevated level of the surface glycoprotein ACA is indicative for a tumor or a predisposition for such a tumor.

20. (withdrawn) The method of claim 19, wherein the compound is an antibody.

21. (withdrawn) a pharmaceutical composition containing a compound capable of reducing or eliminating (a) the expression of the nucleic acid encoding the surface glycoprotein ACA and /or (b) the biological activity of ACA.

22. (canceled)

23. (withdrawn) The method of claim 19, wherein the cancer is a melanoma, leukemia, renal cancer, lung cancer, breast cancer, colon cancer, gastric cancer, or any other form of cancer.

24. (withdrawn) A kit containing the antibody of claim 17.